

Chapter 9

Flooring

Section 900.0 Scope

Sec. 900.1 General: This chapter shall govern the design and use of floor systems and their constituent materials for buildings and structures located in a Special Flood Hazard Area.

Sec. 900.2 Basis for Restriction: Floor systems and flooring materials are restricted according to their vulnerability to floodwater. For the purpose of these Regulations, vulnerability of a given floor or floor material may result from one or more of the following:

- (1) Normal suspended-floor adhesives specified for above grade use are water-soluble or are not resistant to alkali or acid in water, including ground seepage and vapor.
- (2) Flooring material contains wood or paper products.
- (3) Flooring material is not resistant to alkali or acid in water.
- (4) Sheet type floor coverings (Linoleum, rubber, vinyl) restrict evaporation from non-W1 slabs.
- (5) Flooring material is impervious but dimensionally unstable.

Section 901.0 Flooring Classifications

Sec. 901.1 Classes of Flooring: Floor systems and flooring materials are divided into five classes according to their degree of vulnerability. Class 1 floorings require conditions of dryness provided by W1 spaces. Class 2 floors require essentially dry spaces which may be subject to water vapor and slight seepage that is characteristic of W2 spaces. Class 3 flooring may be submerged in clean water during periods of intentional flooding as provided by W3 spaces. Class 4 floorings may be exposed to and/or submerged in floodwaters in interior spaces and do not require special waterproofing protection. Class 5 floors are permitted for partially enclosed or outside uses with essentially unmitigated flood exposure.

Sec. 901.1.1: Floors of a given class may be used in any application for which a lower-numbered class is permitted by these Regulations unless specifically restricted by notation in the chart below. For example, concrete (a Class 5 floor) may be used whenever floors of Classes 1, 2, 3, 4, or 5 are permitted.

Sec 901.1.2 Classes of Typical Flooring Materials: The following chart is intended as an aid to the Owner, Architect/Engineer and the Building Official in assessing the vulnerability of typical materials with respect to the criteria stated in 900.2(1-5). In disputes arising over the merits of particular materials or methods of construction, the Building Official shall be guided by and decide on the basis of those criteria.

	Class
Asphalt tiles (A)	1
with asphaltic adhesives	3
Carpeting (glued-down types)	1
Cement/bituminous, formed-in-place	4
Cement/latex, formed-in-place	4
Ceramic tiles (A)	1
with acid and alkali-resistant grout	3
Chipboard	1

	Class
Clay tile	5
Concrete, precast or in situ	5
Concrete tile	5
Cork	1
Enamel felt-base floor coverings	1
Epoxy, formed-in-place	5
Linoleum	1
Magnesite (magnesium oxychloride)	1
Mastic felt-base flood coverings	1
Mastic flooring, formed-in-place	5
Polyurethane, formed-in-place	5
PVA emulsion cement	1
Rubber sheets (A)1	
with chemical-set adhesives (B)	*5
Rubber tiles (A)	1
with chemical-set adhesives (B)	4
Silicone floors, formed-in-place	5
Terrazzo	4
Vinyl sheets (homogeneous) (A)	1
with chemical-set adhesives (B)	*5
Vinyl tile (homogeneous) (A)	1
with chemical-set adhesives (B)	4
Vinyl tile or sheets (coated on cork or wood product backings)	1
Vinyl-asbestos tiles (semiflexible vinyl) (A)	1
with asphaltic adhesives	4
Wood flooring or underlayments	1
Wood composition blocks, laid in cement mortar	2
Wood composition blocks, dipped and laid in hot pitch or bitumen	2

*Not permitted as Class 2 flooring

Notes: (A) Using normally-specified suspended floor (i.e., above grade) adhesives, including sulfite liquor (lignin or "linoleum paste"), rubber/Asphaltic dispersions, or "alcohol" type resinous adhesives (cumar, oleoresin).

(B) e.g. epoxy-polyamide adhesives or latex-hydraulic cement.